BARRICK MERCUR GOLD MINES, INC. MERCUR CANYON PROJECT EXPANSION MARION HILL, GOLDEN GATE AND SACRAMENTO PITS EXECUTIVE SUMMARY - REVISION TO EXISTING PERMIT December 4, 1986

Mine Name: Mercur Canyon Mine	I. D. No.: <u>ACT/045/015</u>
Project Expansion, Marion Hill, Golden Gate & Sacramento Pits	County:
Operator: Barrick Mercur Gold Mines, Inc P.O. Box 838 Tooele, Utah 84074	New/Existing: New Revision to Existing Mine Mineral Ownership: Fed/State/
Telephone: 801-268-4447	Barrick/Private Surface Ownership: Fed/State/ Barrick/Private
Contact Person: Mr. Glen Eurick	Lease No(s): Not Listed
Life of Mine: @ 19 years	Permit Term: @ 19 years (life of mine)
Legal Description: (of revision) Portions of Seand Section 32, T5S, R3W, SLBM.	ections 5, 6, 7 & 8, T6S, R3W,
Mineral(s) to be Mined: _gold ore, silver and associated precious metals	
Mining Methods: open pit strip mining (drill/blast, shovel & truck)	
Acres to be Disturbed: 461 Acres (proposed), @ 97 Acres previously disturbed	
Present Land Use: wildlife habitat, livestock grazing, recreation, mining Postmining Land Use: same as above	
Variances from Reclamation Standards (Rule M-10) M-10(5) Highwalls Pads, M-10(7) Roads and Pa Soils and Geology:	Granted: M-10(3) Impoundments ads *(See Attachmt. for details)
Soil Description: 6 principal soils series: Accordinate loam; Bezzant Variant loamy clay; Marys Variant soil; Toehead Variant soil; and mapping units pH: varies from 6.9 - 8.2 Special Handling Problems: moderate erosion haz	anila Variant loamy clay; St. and Mined Land & the Slickens vard: on relatively steen
topography a down slope recovery method of together district located earniclinal structure, south end Courty Mts.	ast flank northwesterly trending

are host to hydrothermal gold mineralization. Host rocks are Mississippian age, thin bedded, silty, carbonaceous, bioclastic, wackestones and packstones, silty carbonaceous mudstones and calcareous siltstones & finegrain sandstones overlain by silty, carbonaceous shales. Great Blue Limestone, Manning Shale, fanglomerate, terrace deposits, debris flow, colluvium and

alluvium (oldest to youngest units).

Hydrology:

- Ground Water Description: No significant aquifers encountered during the extensive exploratiry drilling, minor amts. perched water expected to seep into pits (shale aquicludes). Some limited entrapped surface waters may be intercepted if abandoned underground workings are intercepted. Attempts to develop groundwater source for operations have failed. Secondary permeability of limestones quite variable depending on local fracture frequency. Increased recharge to exposed rocks in pit bottom expected from runoff.
- Surface Water Description: Headwaters of Mercur Canyon which is principally an ephemeral drainage. Precipitation values typically low and high evapotrans piration rates. Runoff from Mercur Canyon generally low due to high infiltration into alluvial slopes at canyon mouth. Limited H2O quality & flow data available. TDS averages 500 mg/l, TSS exceeds several thousand mg/l.
- Water Monitoring Plan: A groundwater monitoring plan has been approved by the Division of Environmental Health to monitor potential impacts to the local groundwater regime from the cyanide heap leach pads. Current Monitoring of tailings pond H2O quality will also continue. Surface H2O drainage control structures: diversions, sediment ponds, berms, culverts, dams and impoundments will be used to minimize offsite impacts to hydrologic regime.

Ecology:

- Vegetation Type(s); Dominant Species: 3 major vegetative communities: Pinyon—Juniper Woodland; Mixed Brush (gambel oak, Utah serviceberry, mtn. mahogany & big sagebrush); Bottomland-Disturbed (rabbitbrush, big sage, russian thistle, perrerweed, nettles, forbs & grasses).
- Percent Surrounding Vegetative Cover: P-J Woodland (20%), Mixed Brush (69%), Bottomland-Disturbed (77.5%) based on 1985 transects.
- Wildlife Concerns: Barrick has removed trees along the highway ROW at critical to improve visibility and decrease instance of deer-vehical collisions.

 If this fails to reduce road kills on Highway 73, operator will consider installation of reflecting devices. Meadow Canyon Reservoir will serve as a freshwater source for wildlife and livestock.
- Surface Facilities: Barrick will utilize existing mine & mill facilities to process new ore. New facilities include: 3 new strip pits, waste dumps, topsoil storage sites, haul/access roads, dump leach pads, sediment ponds, Meadow Canyon Reservoir, diversions, associated drainage control structures

Mining and Reclamation Plan Summary: __see attached summary

Surety:

Amount: \$6,657,000 (1999 dollars)

Form: Corporate Self Bonding and Indemnity Agreement

Renewable Term: life of mine (@13 years)

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